IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	10/712,208	**Group Art Unit:**	1792
Applicant(s):	Anand Chellappa et al.	**Examiner:**	Bret P. Chen
Filing Date:	11/12/2003	**Docket No.**	073358-031800
Title:	**Method for reducing coking in a hydrogen generation reactor chamber**	**Customer No.**	33717

CERTIFICATE UNDER 37 CFR 1.6(d)

I hereby certify that this document is being transmitted electronically to the United States Patent and Trademark Office via the EFS Web e-Filing system on Aug. 14, 2008.

Lynne Woodward Craig

Name: Lynne Woodward-Craig

DECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I, Anand Chellappa, do hereby state and declare as follows:

1. I am one of the inventors of the above-identified application, and thus, I am familiar with the application and the invention claimed therein.

2. I graduated in 1997 from the University of Missouri-Columbia with a Ph.D. degree in Chemical Engineering.

3. I have been working in the field of catalysts, chemical reactors and chemical engineering since about 1989 and have spent the past 12 years principally in Research and Technology Development. I am currently Vice President of Research and Technology at Intelligent Energy, Inc.

4. I am an inventor/co-inventor of two issued U.S. patents. I have co-authored about 10 technical papers in this field and have given over 20 speeches on the subject.

5. I have read the *Sandia* article ("*Sandia*"), cited as prior art in the Office Action of March 18, 2008.

6. *Sandia* discloses that "a variety of metals" and a "few metal-ceramic composites" have been used for cold spray (pg. 2, para. 7).

7. *Sandia* teaches that the high velocity impact from cold spraying "disrupts thin metal-oxide films on the particle and substrate surfaces" (pg. 2, para. 4).

8. It is generally known to persons of ordinary skill in the art that thin metal-oxide films form on the outer surface of metal by oxidizing with oxygen in the air.

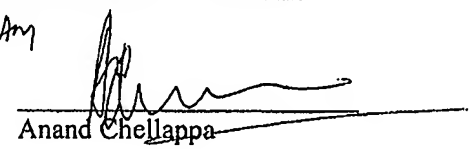
9. These metal-oxide films, native to the metal outer surface, obstruct bond contacts and result in poor bonding quality.

10. As suggested in *Sandia*, cold spraying overcomes the undesirable effects of native metal oxides by disrupting the metal-oxide film with the high-velocity impact to expose the metal underneath (pg. 2, para. 4).

11. One of ordinary skill in the art would conclude, upon reading *Sandia*, that cold spraying can disrupt the native metal oxide on the surface. One would not conclude that metal oxides are among the material purposely used for cold spray.

12. I declare further that all statements made herein of my own knowledge are true; that all statements made herein on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patents issuing thereon.

Executed this 14 day of August, 2008, at ALBUQUERQUE, NM 10:40Am.



Anand Chellappa